Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0208021F: Information Warfare Support

BA 7: Operational Systems Development

COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	11.780	13.779	2.294	0.000	2.294	2.330	2.365	2.401	2.436	Continuing	Continuing
670374: Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt	11.780	13.779	2.294	0.000	2.294	2.330	2.365	2.401	2.436	Continuing	Continuing

Note

In FY 2011, Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt efforts transferred to PE 0310400F, Space Superiority Intelligence for proper execution in AFSPC.

A. Mission Description and Budget Item Justification

This Program Element funds research and development of information operations (IO) and intelligence capabilities required to execute counterspace and information operations in support of combatant commanders. Programs that are supported include the Information Warfare Planning Capability (IWPC), and Counterspace Intelligence Support.

IWPC is a full-spectrum, offensive and defensive, planning capability. IWPC is an Air and Space Operations Center (AOC) weapon system component which will enable operators to develop strategic courses of action for the Joint Forces Air Component Commander (JFACC); create Air Operations Directives (AODs) and Joint Air Operations Plans (JAOPs); and nominate IO "targets" for inclusion into the Master Air Attack Plan and the Joint Integrated Prioritized Target List (JIPTL). This project funds the development and upgrades, testing and evaluation, and installation and training of an evolving suite of interoperable planning and decision support capabilities comprised of software, hardware, and communications products. This project will identify and implement an open, scalable system architecture that will accommodate growth as the virtual world grows and cyber operations change. The project builds functional software modules that are designed to be interoperable with C2 systems such as the Theater Battle Management Core System (TBMCS) and other AOC tools.

The Counterspace effort provides intelligence support for key find, fix, track, target, engage, and assess (F2T2EA) requirements supporting counterspace activities and also performs developmental intelligence collection to support new capability acquisition and development. This project funds transportable intelligence collection and analysis capabilities that are modular (plug-and-play), and can keep pace with technological advances and emerging threats; intelligence support systems supporting Space Situational Awareness activities that provide the requisite current and predictive knowledge of space events and threat conditions; and, intelligence support to Space Protection Programs by providing architectural survivability analysis of critical mission assets for mission assurance. It also supports phased threat system Analysis and Studies (A&S), test support, lab equipment, and Material Acquisition and Exploitation (MAE) for new system development and vulnerability/

Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

3600: Research, Development, Test & Evaluation, Air Force

PE 0208021F: Information Warfare Support

BA 7: Operational Systems Development

susceptibility assessments to support tactics, techniques and procedures (TTP) development, and future threat technology studies necessary for mission area success, the achievement of space superiority, and to preserve the US space advantage across all domains.

This PE funds development and continued research to identify existing military and commercial efforts which can satisfy unfulfilled operational requirements for IO planning and integration. Activities also include studies and analysis to support both current program planning and execution and future program planning.

This program is in Budget Activity 7, Operational System Development, because it studies, develops, and fields IO tools.

B. Program Change Summary (\$ in Millions)

	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	11.780	12.482	0.000	0.000	0.000
Current President's Budget	11.780	13.779	2.294	0.000	2.294
Total Adjustments	0.000	1.297	2.294	0.000	2.294
 Congressional General Reductions 		-0.303			
 Congressional Directed Reductions 		0.000			
 Congressional Rescissions 	0.000	0.000			
 Congressional Adds 		0.000			
 Congressional Directed Transfers 		0.000			
 Reprogrammings 	0.000	1.600			
 SBIR/STTR Transfer 	0.000	0.000			
 Other Adjustments 	0.000	0.000	2.294	0.000	2.294

Congressional Add Details (\$ in Millions, and Includes General Reductions)

Project: 670374: Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt

Congressional Add: In FY 2009: N/A

Congressional Add Subtotals for Project: 670374

Congressional Add Totals for all Projects

	1 1 2000	1 1 2010
	0.000	1.600
4	0.000	1.600
s	0.000	1.600

FY 2010

FY 2009

Change Summary Explanation

Beginning in FY11, RDT&E in support of Intel Support to Counterspace is moved to PE 0301400F. The FY10 increase is due to \$1.6M congressional add.

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DATE: February 2010

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3600: Research, Development, Test BA 7: Operational Systems Develop	t & Evaluatio	n, Air Force			1F: Informati	ion Warfare	Support	670374: Ele Multi-Missio	Protection/		
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
670374: Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt	11.780	13.779	2.294	0.000	2.294	2.330	2.365	2.401	2.436	Continuing	Continuing

Note

In FY 2011, Electronic Combat Spt, C3 Protection/Multi-Mission, Technology and Spt efforts transferred to PE 0301400F, Space Superiority Intelligence for proper execution in AFSPC.

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A. Mission Description and Budget Item Justification

Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force

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ADDDODDIATION/BLIDGET ACTIVITY

Quantity of RDT&E Articles

The Information Warfare Planning Capability (IWPC) is a full-spectrum, offensive and defensive, planning capability. IWPC is an Air and Space Operations Center (AOC) weapon system component which will enable operators to develop strategic courses of action for the Joint Forces Air Component Commander (JFACC); create Air Operations Directives (AOPs) and Joint Air Operator Plans (JAOPs); and, nominate IO "targets" for inclusion into the Master Air Attack Plan and the Joint Integrated Prioritized Target List (JIPTL).

This project funds the development of an evolving suite of interoperable planning and decision support capabilities comprised of software, hardware, and communications products. This project will identify and implement an open, scalable system architecture that will accommodate growth as the virtual world grows and cyber operations change. The project builds functional software modules that are designed to be interoperable with baseline C2 systems such as the Theater Battle Management Control System (TBMCS) and other AOC tools. IWPC will participate in the Joint Expeditionary Force Experiment (JEFX) as part of the overall IWPC software development and integration effort into the AOC.

The Counterspace effort provides intelligence support for key find, fix, track, target, engage, and assess (F2T2EA) requirements supporting counterspace activities and also performs developmental intelligence collection to support new capability acquisition and development. This project funds transportable intelligence collection and analysis capabilities that are modular (plug-and-play), and can keep pace with technological advances and emerging threats. It also supports phased threat system analysis and studies (A&S), test support, lab equipment, and Material Acquisition and Exploitation (MAE) for system development and vulnerability/susceptibility assessments to support tactics, techniques and procedures (TTP) development, and future threat technology studies necessary for mission area success and achievement of space superiority.

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: Febr	uary 2010	
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0208021F: Information Warfare S		Multi-Missic	ectronic Com	gy and Spt	
This project is in Budget Activity 7, Operational System Developer commercial research and development efforts which can satisfy					s existing mi	litary and
B. Accomplishments/Planned Program (\$ in Millions)		, h				
b. Accomplishments/Flanned Frogram (\$ 111 Millions)	r					·
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: IWPC Installation/Training/Upgrades		2.317	2.190	2.294	0.000	2.294
FY 2009 Accomplishments: In FY 2009: This effort allowed the program office to maintain warfighter requirements. This project funded the upgrades, in of planning and decision support tools. Software and hardwa existing technology and maintain interoperability with external required testing and contract support.	nstallation, and training of the IWPC suite re updates are necessary to keep up with					
FY 2010 Plans: In FY 2010: This funding continues the maintaining of the IW requirements. This project funds the upgrades, installation, a and decision support tools. Software and hardware updates a technology and maintain interoperability with external program testing and contract support.	nd training of the IWPC suite of planning are necessary to keep up with existing					
FY 2011 Base Plans: In FY 2011: This funding continues the maintaining of the IW requirements. This project funds the upgrades, installation, a and decision support tools. Software and hardware updates a technology and maintain interoperability with external program testing and contract support.	nd training of the IWPC suite of planning are necessary to keep up with existing					
FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.						

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: Feb	ruary 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0208021F: Information Warfare S	Support	PROJECT 670374: Electronic Combat Spt, C3 Protecti Multi-Mission, Technology and Spt				
B. Accomplishments/Planned Program (\$ in Millions)			'				
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
MAJOR THRUST: Counterspace Intelligence Support		9.463	9.989	0.000	0.000	0.000	
FY 2009 Accomplishments: In FY 2009: This effort provided intelligence support for support project supports space situational awareness activities provid survivability analysis for mission assurance. This also include material acquisition and exploitation along with tactic, techniq FY 2010 Plans: In FY 2010: This effort continues providing intelligence support This project supports space situational awareness activities pand survivability analysis for mission assurance. This also incompared acquisition and exploitation along with tactic, techniq	ing predictive threat conditions and is the testing, lab environment, and ue, and procedure development. In the for supporting counterspace activities are roviding predictive threat conditions ludes the testing, lab environment, and						
FY 2011 Base Plans:	de, and procedure development.						
In FY 2011: N/A							
FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.							
Acco	emplishments/Planned Programs Subtotals	11.780	12.179	2.294	0.000	2.294	
		FY 2009	FY 2010]			
Congressional Add: In FY 2009: N/A		0.000	1.600	-			
FY 2009 Accomplishments:							
			1	1			

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force			DATE: February 2010
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
3600: Research, Development, Test & Evaluation, Air Force	PE 0208021F: Information Warfare Support	670374: <i>Ele</i>	ectronic Combat Spt, C3 Protection/
BA 7: Operational Systems Development		Multi-Missio	on, Technology and Spt

B. Accomplishments/Planned Program (\$ in Millions)

	FY 2009	FY 2010
FY 2010 Plans: In FY 2011: N/A		
Congressional Adds Subtotals	0.000	1.600

C. Other Program Funding Summary (\$ in Millions)

			FY 2011	FY 2011	FY 2011					Cost To	
<u>Line Item</u>	FY 2009	FY 2010	Base	000	<u>Total</u>	FY 2012	FY 2013	FY 2014	FY 2015	Complete	Total Cost
• PE 0208021F: Information	7.691	6.498	9.143	0.000	9.143	8.688	9.325	9.290	9.595	0.000	0.000
Warfare Support, (OPAF)											
• PE 0208021F (1): Information	72.943	66.868	66.187	0.000	66.187	66.336	71.352	72.062	75.399	0.000	0.000
Warfare Support (O&M)											

D. Acquisition Strategy

IWPC fielding will continue throughout FY10. Future upgrades will be delivered as maintenance releases with minor increases in capability.

E. Performance Metrics

Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0208021F: Information Warfare Support

PROJECT

670374: Electronic Combat Spt, C3 Protection/ Multi-Mission, Technology and Spt

Product Development (\$ in Millions)

				FY 2	2010	FY 2 Bas		FY 2		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
IWPC Prime Contract	SS/FFP	General Dynamics San Antonio, TX	1.614	1.327	Oct 2009	1.415	Oct 2010	0.000		1.415	Continuing	Continuing	Continuing
Counterspace and R&D Intelligence Support	Various	Various Lackland AFB, TX	2.271	2.526	Nov 2009	0.000		0.000		0.000	Continuing	Continuing	Continuing
Architecture Upgrade Support to SSA,SSP & Counterspace	Various	Various Lackland AFB, TX	1.611	1.573	Nov 2009	0.000		0.000		0.000	Continuing	Continuing	0.000
Data Analysis and Product Development for R&D	Various	Various Lackland AFB, TX	5.094	5.434	Nov 2009	0.000		0.000		0.000	Continuing	Continuing	0.000
Deployment Support for Testing and Data Collection	Various	Various Lackland AFB, TX	0.487	0.456	Nov 2009	0.000		0.000		0.000	Continuing	Continuing	0.000
		Subtotal	11.077	11.316		1.415		0.000		1.415			

Remarks

Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force

PE 0208021F: Information Warfare Support

670374: Electronic Combat Spt, C3 Protection/ Multi-Mission, Technology and Spt

Test and Evaluation (\$ in Millions)

				FY 2	2010	FY 2 Ba	2011 se	FY 20 OC		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
IWPC 46 Det 2 Test Support	ТМ	46th TS Eglin AFB, FL	0.130	0.222	Apr 2010	0.226	Apr 2011	0.000		0.226	Continuing	Continuing	Continuing
IWPC 605th Test Support	ТМ	605th Eglin AFB, FL	0.064	0.222	May 2010	0.226	May 2011	0.000		0.226	0.000	0.512	0.000
	·	Subtotal	0.194	0.444		0.452		0.000		0.452			

Remarks

Support (\$ in Millions)

				FY 2	FY 2010		2011 FY :		2011 CO	FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Acquisition Support	TM	Various San Antonio, TX	0.187	0.220	Nov 2009	0.225	Nov 2010	0.000		0.225	Continuing	Continuing	0.000
Engineering Support	FFRDC	MITRE San Antonio, TX	0.229	0.147	Oct 2009	0.150	Oct 2010	0.000		0.150	Continuing	Continuing	0.000
Operating Costs	TBD/TBD	OL-AA 950 ELSG San Antonio, TX	0.093	0.052	Oct 2009	0.052	Oct 2010	0.000		0.052	Continuing	Continuing	0.000
Congressional Add	TBD/TBD	TBD TBD	0.000	1.600	Feb 2010	0.000		0.000		0.000	Continuing	Continuing	0.000
		Subtotal	0.509	2.019		0.427		0.000		0.427			0.000

Remarks

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

3600: Research, Development, Test & Evaluation, Air Force

PE 0208021F: Information Warfare Support

670374: Electronic Combat Spt, C3 Protection/ Multi-Mission, Technology and Spt

BA 7: Operational Systems Development

	Total Prior Years Cost	FY 2	010	FY 2 Ba	2011 se	FY 2	-	FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	11.780	13.779		2.294		0.000		2.294			

Remarks

Total Prior Years Cost may include only FY 2009 data.

Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

PROJECT

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force PE

BA 7: Operational Systems Development

PE 0208021F: Information Warfare Support

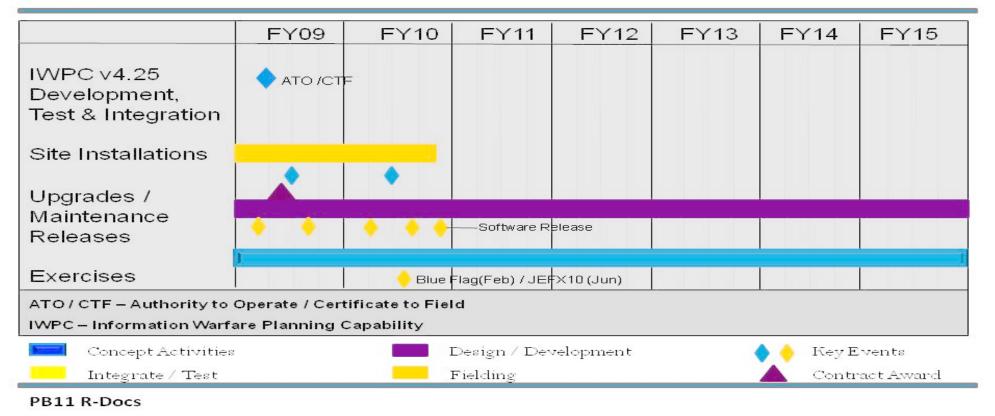
PROJECT

670374: Electronic Combat Spt, C3 Protection/

Multi-Mission, Technology and Spt



IWPC Schedule



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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

DATE: February 2010

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0208021F: Information Warfare Support

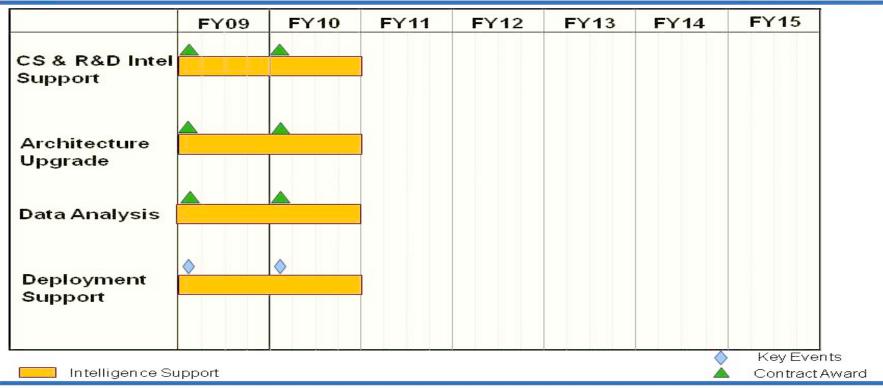
PROJECT

670374: Electronic Combat Spt, C3 Protection/

Multi-Mission, Technology and Spt



CS Intelligence Program Schedule



PB11 R-Docs

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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force

APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

BA 7: Operational Systems Development

DATE: February 2010

R-1 ITEM NOMENCLATURE
PE 0208021F: Information Warfare Support
Multi-Mission, Technology and Spt

Schedule Details

	St	art	E	nd
Event	Quarter	Year	Quarter	Year
IWPC Development, Test & Integration	1	2009	1	2009
IWPC Fielding/Site Installation	1	2009	4	2010
IWPC Upgrades/Maintenance Releases	1	2009	4	2011
Exercises	1	2009	4	2011
Counterspace and R&D Intelligence Support	1	2009	4	2010
Architecture Upgrade Supporting SSA, SSP, & Counterspace	1	2009	4	2010
Data Analysis and Product Development for R&D	1	2009	4	2010
Deployment Support for Testing and Data Collection	1	2009	4	2010